

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/055648 A1

(51) International Patent Classification⁷:

H04R 7/04

(74) Agent: KWON, Hyuk-Sung; 12F, Seo-Jeon Bldg., 1330-9 Seocho-dong, Seocho-Gu, Seoul 135-858 (KR).

(21) International Application Number:

PCT/KR2004/003156

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 2 December 2004 (02.12.2004)

(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data:

10-2003-0088157

5 December 2003 (05.12.2003) KR

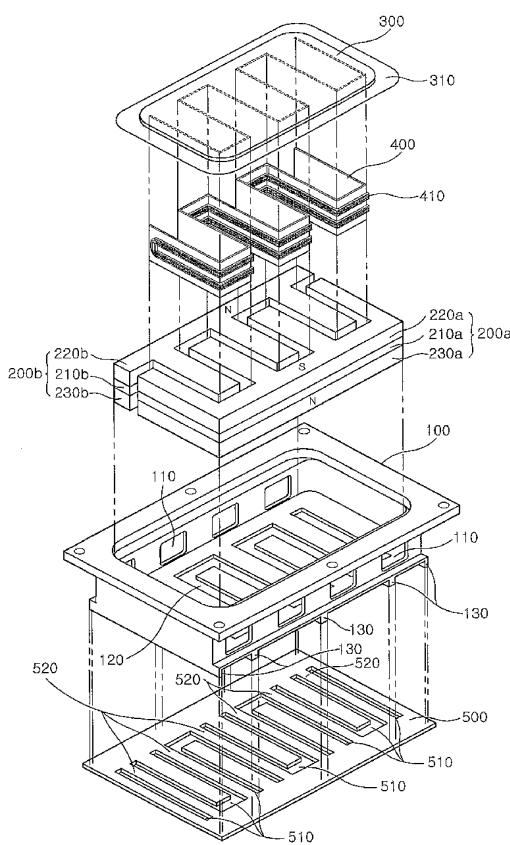
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicants and

(72) Inventors: SHIN, Joung-Youl [KR/KR]; Samsung Remian Apt. 103-1804, 414, Naeson-Dong, Uiwang 437-804 (KR). HAN, Byung-Wan [KR/KR]; 401, Wooman Billa, 1478-4 Seocho3-Dong, Seocho-Gu, Seoul 137-868 (KR).

[Continued on next page]

(54) Title: PLANE SPEAKER HAVING COIL PLATE GUIDE DEVICE



(57) Abstract: The present invention relates to a plate type speaker with a planar diaphragm. The plate type speaker of the present invention comprises a base frame; at least one magnetic body coupled to the base frame such that opposite polarities are provided at adjacent lateral positions and are spaced apart by a predetermined distance from each other; a diaphragm; at least one coil plate that is formed with a voice coil wound on either or both of sides thereof, and is inserted vertically into spaces between the opposite polarities of the magnetic body and connected to the diaphragm; and a coil plate guide means coupled to the coil plate for guiding the position and vibration direction of the coil plate such that the coil plate is spaced from the magnetic bodies and vibrates vertically. The use of the plate type speaker with the coil plate guide means according to the present invention allows the position of a coil plate to be guided so that the coil plate does not come into contact with a permanent magnet or upper and lower plates even though the coil plate vibrates vertically, thereby preventing output of abnormal sound due to interference of the coil plate with the internal parts.

WO 2005/055648 A1



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.